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ON NEW AND KNOWN COLEOPTERA OF THE FAMILIES COCCINELLIDÆ AND CLERIDÆ.

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FAMILY COCCINELLIDÆ.

Psyllobora plagiata, new species.

Size of *20-maculata*, punctuation slightly finer; thoracic spots similar but not as heavy as in the average *20-maculata*. Elytra with two spots on each side of base, two median subsutural spots and below these a large, broad, more or less angulate, oblique black patch and three spots of variable size near side margin, the first slightly antemedian, the second below this but further removed from the margin than the first and third, the latter situated at about apical fifth and on each side of suture a subapical spot. Under side of body as in *20-maculata*.

Huachuca Mts., Arizona.

Some of the spots near suture or side margin may be absent or very faint, but the large postmedian patch is always present.

Brachyacantha arizonica, new species.

Slightly smaller and more rounded than *ursina*, similarly marked, but without median spot on lateral margin and with basal spots always confluent. Head pale in the male; pale at middle, black at apical margin and infuscate at sides in the female. Thorax black, apical margin and a large triangular spot at sides pale in the male, in the female the apical margin very narrowly and a narrow subtriangular spot at apex, which extends slightly below middle, pale. Elytra black, two basal spots on each side, large and always broadly confluent, a large rounded, discal spot near suture and large apical spot nearer the margin than suture yellowish or reddish. Punctuation of thorax and elytra as in *ursina*. Under side of body black; legs pale in the male; femora piceous, tibiæ and tarsi pale in the female. Anterior tibiæ with the usual tooth near base, and in addition a smaller, but more obtuse one near apex.

Abdomen in the male as in *ursina*, but the fifth and sixth segments more depressed at middle. Length 3.5 mm.; width 2.75 mm.

Huachuca Mts., Arizona.

This species varies a good deal in the extent of the elytral spots. All the spots may unite more or less and gradually extend over the entire surface, leaving only the suture and apex broadly, the side margin narrowly and a spot on the humeral callus black. This species differs principally from *ursina* and *testudo* by the very large and always broadly confluent basal spots, the absence of the median marginal spot on each elytron, the bidentate anterior tibiæ, and in addition from *ursina* by the shorter and more rounded form.

Brachyacantha bistripustulata var. **decora Casey,** Journ. N. Y. Ent. Soc., Vol. VII, p. 119.

Very abundant near Brownsville, Texas, and with it occurred, though very rarely, the typical *bistripustulata*.

Hyperaspis weisei, new species.

Form and size of *proba*. Head black, distinctly punctate. Thorax black, side margin broadly pale; surface more finely punctate than the elytra. Elytra black, a marginal vitta extending to about basal half, becoming broader and much dilated inside at its apical end, a discal and two apical spots yellow; punctuation slightly coarser than that of thorax. Body beneath black; abdominal segments coarsely punctate, the last five reddish. Legs pale. Length

Brownsville, Texas. Collected by the late Ottomar Dietz.

Following Gorham in the "Biologia" I reported * this as *kunzei*, which is, according to Weise, a different insect. The inner apical spot is nearer the suture than the apex and rounded, the outer is close to the margin, elongate and shows in one specimen a tendency to become united with the inner spot.

Hyperaspis lengi Schaef., Bull. Brooklyn Inst. Mus., Vol. I, p. 146.

I have one specimen of this species from the Huachuca Mts., Arizona, with the discal and apical spots not connected, resembling closely *rotunda* Casey. The latter species is, however, always more globose, has the front angles of thorax rather produced, in *lengi* not at all produced, and the clypeus feebly truncate-emarginate, in *lengi* distinctly arcuate-emarginate.

Hyperaspis pratensis Lec.

This species, which was described from Kansas, seems to be rare in collections. I have a specimen from Hopatcong, N. J., collected by

* Bull. Brooklyn Inst. Mus., Vol. I, p. 145.

the late Ottomar Dietz. It resembles *Brachyacantha bistripustulata* in size and markings but is of slightly more elongate form.

FAMILY CLERIDÆ.

List of Species from Brownsville, Tex.

Macrotelus terminatus Say.
Macrotelus terminatus var. *pallipes* n. var.
Tillus elegans Er.
Cymatodera turbata Horn.
Cymatodera oblique-fasciata Schaef.
Cymatodera brunnea Melsh.
Cymatodera sirpata Horn.
Cymatodera balteata Lec.
Cleronomus (*Colyphus*) *furcatus* Schaef.
Clerus quadrisignatus Say.
Clerus abruptus Lec.
Clerus crabronarius Spin.
Clerus lunatus Spin.
Hydnocera tricolor Schaef.
Hydnocera pubescens Lec.
Hydnocera omogera Horn.
Hydnocera discoidea Lec.
Hydnocera knausi Wickh.
Hydnocera schusteri Lec.
Chariessa vestita Spin.
Cregya mixta Lec.
Pelonium maculicolle Schaef.
Enoplium granulatipenne Schaef.
Enoplium nigrescens Schaef.
Orthopleura texana Bland.
Necrobia rufipes Fab.
Necrobia violacea Linn.

List of Species from the Huachuca Mts., Arizona.

Cymatodera antennata n. sp.
Cymatodera puncticollis (Bland) Horn.
Cymatodera latifascia Schaef.
Cymatodera oblita Horn.
Cymatodera flavosignata n. sp.
Cymatodera bicolor Skin.
Cymatodera californica Horn.
Cymatodera undulata var. *arizonica* n. var.
Cymatodera lævicollis n. sp.
Cymatodera sp.
Trichodes illustris Horn.
Clerus spinolæ.
Clerus bioculatus Skin.
Clerus ocreatus Horn.
Clerus quercus Schaef.
Clerus abruptus Lec.
Clerus nigriventris Lec.
Clerus pinus Schaef.
Clerus mœstus Klug.
Hydnocera niveifascia Schaef.
Hydnocera unifasciata Say.
Hydnocera arizonica n. sp.
Hydnocera cribripennis Fall.
Hydnocera simulans n. sp.
Hydnocera nigrina n. sp.
Phyllobænus dislocatus Say.
Enoplium humerale Horn.
Lebasiella discoidea Lec.
Lebasiella mesosternalis n. sp.
Necrobia rufipes.

Descriptions of New Species and Notes.

Macrotelus terminatus var. pallipes, new variety.

Form and size of *terminatus* from which it differs by the almost entirely black prothorax, brown elytra and pale tibiæ.

Brownsville, Texas.

The moderately large series which I have taken or raised from branches of *Acacia farnesiana* and *Acacia flexicaulis* differs constantly in the above-mentioned characters from *terminatus;* of the latter I obtained only one specimen. The metasternum is also more or less reddish in this variety.

Cymatodera antennata, new species.

Color dark brown; antennæ, palpi, legs and under side paler. Head moderately coarsely and densely punctate; pubescence sparse. Eyes prominent. Antennæ reaching to about middle of elytra; joints two and three small, together as long as joint four; joints four to eleven equal, subserrate. Prothorax twice as long as wide at apex; rather strongly constricted at basal third, less strongly at apical third; surface rather sparsely pubescent and densely punctate, the punctures, especially at sides, more or less confluent. Elytra twice as wide as the thorax at base; parallel to about apical fourth; apices rounded; pubescence short and rather inconspicuous; the row of punctures becoming gradually finer posteriorly and entirely obliterated at apex; intervals as wide or slightly narrower than the punctures, sparsely, finely, irregularly punctate. Under side of body scarcely pubescent, meso- and metasternum densely and moderately coarsely punctate; abdomen very finely and densely punctate. Legs sparsely pubescent. Length 7–9 mm.

Male. — Fifth ventral segment truncate at apex. Sixth short, broadly but feebly emarginate at apex. Last dorsal segment truncate at apex, as wide as the last ventral.

Female. — Sixth ventral short and broadly rounded.

Huachuca Mts., Arizona.

The short second and third antennal joints bring this species near *longicornis* from which it is distinguished by the uniform color, the form of the last ventral segments of the male, and the subserrate antennæ. It resembles *cylindricollis* Chev. closely, but has the eyes larger, more narrowly separated and the antennal joints four to ten wider.

Cymatodera pallida, new species.

Yellowish-testaceous, head and thorax slightly darker. Head shining, rather sparsely and finely punctate and feebly pubescent; eyes prominent, rather widely separated; antennal joints two, three and four nearly equal in length, narrower than five and following joints and each shorter than joint five. Thorax feebly constricted subapically, laterally strongly compressed below middle, thence slightly divergent to base; surface rather sparsely punctate and not densely pubescent. Elytra parallel, apices rounded; rows of punctures coarse, towards apex finer; intervals as wide or near

base slightly wider than the punctures ; pubescence short, not very abundant. Metasternum sparsely punctate ; abdomen more densely and finely and scarcely at all pubescent. Length 5–6 mm.

Male. — Fifth ventral segment broadly but feebly emarginate ; sixth narrower ; short and feebly emarginate at apex ; last dorsal as wide as the last ventral but slightly longer and truncate at apex.

Female. — Last ventral and dorsal segments rounded at apex.

Huachuca Mts., Arizona.

This species is allied to *puncticollis* (Bland) Horn, and *delicatula* Fall, but is more elongate, has the eyes more widely separated and differs also in the form of the last dorsal segment of the male.

Cymatodera latefascia Schaef., Jour. N. Y. Ent. Soc., Vol. XII, p. 216.

This species, of which I now have seen more material, seems to be very close to *cylindricollis* and may prove to be the same ; it differs very slightly from a female Mexican specimen sent me as somewhat doubtfully that species by Mr. Schenkling.

Cymatodera flavosignata, new species.

Elongate, dark brown ; elytra with an irregularly angulate, narrow median fascia yellow, below this and also near base and around humeri a few more or less distinct pale streaks. Head coarsely and densely punctate. Eyes moderate. Antennæ reaching slightly below humeri ; joints elongate, the second shorter than third, the outer slightly subtriangular. Prothorax elongate, feebly constricted at apical third, more distinctly so at basal third ; disk moderately, coarsely and more or less confluently punctate ; pubescence moderately dense and longer than on elytra. Elytra about one and one half times as wide as thorax at base ; feebly widening posteriorly ; apices arcuate truncate, sutural angles rounded ; rows of punctures moderately coarse, more or less obliterated from the middle to apex on the disk but continued nearly to apex at sides ; intervals rather sparsely punctate in basal half, much more densely from middle to apex, surface rather sparsely pubescent. Under side sparsely pubescent ; mesosternum coarsely punctate ; metasternum and abdomen finely and sparsely punctate. Legs more densely pubescent than abdomen. Length 12 mm.

Male. — Fifth ventral segment broadly arcuate-emarginate ; sixth parallel, broadly arcuate-emarginate, not carinate on the disk, but the apical and side margins slightly thickened. Last dorsal narrower than last ventral, elongate, narrowing to apex, and deeply, subtriangularly notched at middle, the angles rounded ; the surface above the incisure broadly and rather deeply impressed.

Female. — Fifth ventral very feebly arcuate-emarginate ; sixth elongate and rather strongly narrowing to apex, which is broadly but rather feebly emarginate. Last dorsal more deeply emarginate with the angles more or less acute.

Huachuca Mts., Arizona, July and August.

The narrow, strongly undulate yellow median fascia and the form of the last ventral and dorsal segments of both sexes make this an easily recognizable species. It should be placed near *morosa* Lec.

Cymatodera lævicollis, new species.

Form, color and markings nearly as in *sirpata* but thorax reddish brown, shining and the entire apex of elytra black. Head shining, moderately densely punctate; front with two impressions, between these the surface is convex; eyes rather small and feebly prominent; antennæ scarcely reaching beyond base of prothorax, second joint slightly shorter than any of the following joints, the joints nearly equal in length, but the outer slightly stouter. Thorax feebly impressed in about apical fourth, below the impression moderately broadly dilated; strongly compressed laterally in about apical third, the sides then divergent to base; disk almost impunctate, the punctures evident at sides and apex; surface very sparsely pubescent with shorter and longer hairs. Elytra distinctly wider than the head, gradually but feebly divergent towards apex; apices conjointly rounded; the rows of punctures gradually disappearing towards apex, the punctures moderately coarse; pubescence fine and rather inconspicous. Abdomen somewhat densely punctate and scarcely pubescent; last ventral as wide as the last dorsal, sides oblique, apex feebly rounded. Length 9.5 mm.

Huachuca Mts., Arizona, one female.

This species is best placed near *sirpata* from which it differs in having the thorax very smooth, the eyes slightly smaller and more widely separated, the antennal joints, though similar, slightly shorter and narrower, the impressed front and the apex of elytra largely black. The thorax is not unicolorous but slightly infuscate at sides.

Cymatodera undulata var. arizonica, new variety.

Form, size and sculpture of *undulata* from which it differs in having the elytra brown with a lateral, pale median spot. Length 10 mm.

Huachuca Mts., Arizona.

I have given this form a name on account of its close resemblance in form and coloration to *belfragei* and allies. The form is perhaps a little more slender, the pubescence of thorax less dense and the punctuation of head and thorax not as coarse and dense as in the majority of specimens of *undulata*, but this is variable also in the latter. The terminal abdominal and ventral segments as in *undulata*. An entirely brown unicolorous specimen is described by Spinola as *brunnea*.

Cymatodera cephalica, new species.

Apterous, form of *angustata* Spin., dark brown, elytra with a more or less distinct pale, median fascia. Head not densely punctate; surface more or less wrinkled and rather sparsely pubescent. Prothorax elongate; constriction at apical and basal third rather feeble; antescutellar impression distinct; punctuation and pubescence rather sparse and fine. Elytra scarcely wider at base than the thorax; sides slightly

diverging to apex; apices rounded; the row of punctures moderarely coarse at base finer at sides and apex, on the disk obliterated from about middle to apex; intervals finely not densely punctate; surface rather sparsely pubescent. Metasternum rather sparsely punctate, abdomen more densely. Length 10.5–11.75 mm.

Male. — Fifth ventral segment broadly emarginate; sixth broadly emarginate, the angles not prolonged. Last dorsal notched at middle.

Female. — Fifth ventral less deeply emarginate than in the male; sixth ventral and last dorsal segments oval and subtruncate at tip.

El Taste and Santa Rosa, Lower California, collected by Mr. Gustav Beyer, to whom I am indebted for the pair.

The abdominal characters of the male are very similar to *ovipennis* Lec. but the sixth ventral is not nearly as deeply emarginate and the impressed line above the notch of the last dorsal present in *ovipennis* is absent in *cephalica.*

Both *angustata* and *cephalica* differ from *vandykei* and *ovipennis* in the apparently larger head, the less prominent eyes and the less deeply constricted apical and basal third of thorax; the latter is in *cephalica* more shining, the punctuation very sparse and fine, while the punctuation in all our other apterous species is very dense and rather coarse.

Trichodes illustris Horn, Proc. Cal. Acad., Vol. IV, p. 382.

Nearly all the specimens of this species taken in the Huachuca Mts., Arizona, have black legs and vary greatly in coloration. Some of the varieties approach very closely *peninsularis.*

Clerus corallinus Fall, Trans. Am. Ent. Soc., Vol. XXXIII, p. 240.

This is a variety of *abruptus.* Mr. Leng has in his collection a fine series from Texas with the necessary intermediate forms. *Clerus abruptus* is a variable species in regard to coloration, markings and punctuation and it seems to me that *flavosignatus, recurvatus* and *lætus* are merely variations of *abruptus,* though Mr. Schenkling listed them as distinct species in "Genera Insectorum."

Hydnocera unifasciata Say, Journ. Acad. Phil., Vol. V., p. 175.

One of my Arizona specimens is a little more robust than the average *unifasciata* and if seen alone without other specimens may be considered a different species, especially as the white fascia is absent and the dense laterally directed hairs covering the fascia are easily abraded in not well preserved specimens. This, however, is found also occasionally in eastern specimens.

Hydnocera fuchsi, new species.

Form of *subænea*, black, thorax subæneous, elytra blue, with a transverse median fascia of whitish hairs, apex of front and middle tibiæ, tarsi and antennæ pale. Head very densely and subconfluently punctured; eyes prominent. Thorax slightly wider than long, sides broadly dilated a little below the apex, towards base nearly parallel, basal transverse line strongly impressed, subapical impressed line fine but rather strongly impressed; surface rather densely but not very coarsely punctate, moderately densely pubescent, with recumbent, short, pale hairs intermixed with some longer darker hair; disk at basal half with an almost smooth narrow space Elytra covering the abdomen, scarcely wider than the head, sides nearly parallel, apices separately rounded and rather strongly serrate; surface coarsely and moderately densely punctate in nearly the whole basal half; apical part below the fascia more densely and cribrately punctured; pubescence rather inconspicuous, fine and short, the hairs denser and longer in a narrow transverse space about middle. Under side rather sparsely pubescent, except the metasternal side pieces, which are more densely clothed with longer white hairs. Length 5.5 mm.

Nogales, Arizona, collected by F. W. Nunnenmacher and given me by Mr. Chas. Fuchs.

Judging from the description, this species seems to be very near the lately described *wickhami* Wolcott, which has the elytra much wider than the head, shorter than the abdomen, and the apices not serrate.

Hydnocera arizonica, new species.

Very similar in sculpture, color and markings to *pallipennis*, from which it differs in the longer, parallel elytra, always covering the abdomen, the obliquely rounded sides at apex and the non-serrate apices of elytra. Length 4.5 mm.

Huachuca Mts., Arizona.

In the two type specimens, male and female, the median band is rather narrow, with irregular outline, and the legs are pale. These are, however, variable; the legs are in some specimens infuscate and the median dark band is broader and extends at sides nearly to the humeri. The dark markings on elytra are distinctly greenish.

This species and *niveifascia* occurred commonly on oak in July and August.

Hydnocera cribripennis Fall, Canad. Ent., Vol. XXXVIII, p. 116.

I refer a few specimens from the Huachuca Mts., Arizona, to this species which was described from Fedor, Texas. They differ slightly from the description but not sufficiently to give them a name. The subbasal fascia in these specimens is reduced to a transverse spot which is in one male narrowly connected with the yellow spot seen on the

inflexed portion of the base on each side of the scutellum. The markings, as shown by *omogera*, *discoidea*, etc., differ so greatly that very little stress can be laid on these differences.

Hydnocera simulans, new species.

Form of *scabra* black; head and thorax slightly æneous; elytra bluish black, with a subtriangular basal and a transverse submedian spot yellow; legs yellow, except posterior and intermediate femora and tarsi, which are more or less infuscate. Head, including the eyes, nearly as wide as the elytra at base, but narrower than the thorax; densely pubescent, obscuring the surface sculpture. Thorax deeply constricted at apex; sides below the constriction strongly dilated and then nearly parallel to base; sculpture obscured by the dense pale pubescence. Elytra normally covering the abdomen; scarcely narrowing towards apex; apices separately rounded, but the outer margin obliquely rounded and not serrate; punctuation very coarse and close, apical portion below the submedian spot cribrately punctate; pubescence much sparser than on head and thorax, slightly denser and directed outwardly on the submedian, pale spot. Body below sparsely pubescent. Length 4 mm.

Huachuca Mts., Arizona.

I have placed with this species two smaller specimens which have no basal spot, but only the postmedian pale spot, otherwise they do not offer any differences. These seem to be the same as the one mentioned by Gorham in the "Biologia" on page 345 under 14 (c) but not described.

This species is closely allied to *cribripennis* Fall, which has slightly shorter elytra, apices broadly and more evenly rounded and serrate and the submedian spot a little nearer to apex. It seems also to be allied to *rudis* Gorh., which is said to have the sides of thorax not much dilated and head and thorax clothed with black, upright pile, besides the ashy, depressed hairs.

Hydnocera nunnenmacheri, new species.

Blue-black; head and thorax slightly greenish; antennæ and tarsi only paler; elytra with a median fascia of dense, pale hairs. Head densely punctate, pubescence moderate, recumbent, pale, with some longer darker hairs intermixed. Thorax narrower than the head; apical constriction strong; sides strongly dilated; basal impressed line strong; surface densely punctate at sides, very slightly sparser on disk; pubescence moderate, pale, recumbent, intermixed with longer dark hairs. Elytra about as wide as the head, rather short; sides parallel; apices separately rounded and feeebly serrate; surface somewhat coarsely but not densely punctate; intervals between the punctures rugose, feebly at base, but more strongly below the median fascia of pale hairs; surface sparsely pubescent with pale, short hairs, intermixed with longer darker hairs, the pale hairs more numerous and denser in a transverse space at middle, forming a fascia. Body beneath sparsely pubescent; abdomen slightly longer than the elytra. Length 4 mm.

Nogales, Arizona, one male kindly given me by Mr. F. W. Nunnenmacher.

This little species is of the form of *scabra*, but with shorter elytra, different punctuation and the fascia of pale hairs at middle. It also resembles somewhat the specimens without basal fascia mentioned above under the description of *simulans*, but these have also longer elytra and a little different elytral sculpture.

Hydnocera parviceps, new species.

Elongate, black; intermediate tibiæ and tarsi, anterior femora obliquely in apical half, tibiæ, tarsi and antennæ, except last joint, pale. Head little wider than the thorax in its widest part; behind the eyes obliquely narrowing; between the eyes shallowly impressed; front rather closely punctate, more sparsely on the occiput; pubescence moderate; eyes moderately prominent; antennal joints short and stout. Thorax as long as wide; near apex more strongly constricted than near base; sides rather broadly rounded, but scarcely dilated, parallel in basal third; surface very finely and densely punctate, intermixed with some more sparsely placed, larger punctures which are absent from a narrow median space; pubescence pale, sparser than on the head and with longer, pale hairs intermixed. Elytra elongate, narrow, about as wide as the head including the eyes, feebly narrowing to apex; the latter dehiscent, separately rounded and not serrate; surface feebly convex at base, flattened und feebly depressed a little before apex, the part behind the depression convex; punctuation moderately coarse and rather close and almost uniform; pubescence pale and sparse. Abdomen about one third longer than the elytra, sparsely punctate and sparsely pubescent with moderately long, pale hairs. Length 5 mm.

Senator, Arizona.

One female given me some years ago by Mr. Charles Palm. This species has a form different from any *Hydnocera* known to me; compared with *longicollis* it is a little more robust, has slightly wider elytra and thorax, and smaller head.

Hydnocera nigrina, new species.

Form of *tabida*, but thorax wider and distinctly dilated at sides; black, front tibiæ and tarsi, intermediate tarsi, antennæ and palpi pale. Head shining, finely and not densely punctate; front impressed; pubescence sparse. Thorax narrower than the head; sides very distinctly dilated below the subapical impression and parallel below the dilated part; surface finely rugose and not densely pubescent. Elytra at base scarcely wider than the thorax in its widest part; humeri oblique; sides gradually, but not strongly narrowing to apex; the latter dehiscent, separately rounded and not serrate; before the apex depressed, below the depression convex; punctuation rather coarse and close. Under side and legs rather feebly pubescent. Abdomen about one fourth longer than the elytra. Length 4 mm.

Huachuca Mts., Arizona.

By its form this species has to be placed with *tabida* and *longicollis*, from which the distinctly dilated sides of thorax and the dark legs

will separate it. The Central-American *subulata* resembles *nigrina* somewhat but differs in the more attenuated elytra, wider humeri and the elytral apices truncate with the sutural angle mucronate.

Lebasiella mesosternalis, new species.

Form of *marginella* and *pallipes;* black; head, thorax, antennæ, except club, and median part of mesosternum red; elytra dark blue. Head and thorax moderately coarsely and densely punctate, clothed with erect dark hairs. Elytra coarsely and closely punctate; pubescence dark, short and erect as on thorax. Abdomen moderately coarsely and less closely punctate than the elytra. Length 4 mm.

Huachuca Mts., Arizona.

The blue, coarsely punctate elytra separates this species from *marginella* and *pallipes;* the shorter robust form and the narrower intermediate antennal joints which are similar to *marginella* and *pallipes* from the rest of our species.

STUDIES ON MYRMECOPHILES. II. HETÆRIUS.

BY WILLIAM MORTON WHEELER,

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The myrmecophilous beetles of the Histerid genus *Hetærius*, which are widely distributed over the north temperate zone, have attracted the attention of a number of entomologists. Lewis (1884) has described a couple of species (*H. gratus* and *optatus*) from the nests of Japanese ants. The common European *H. ferrugineus* has been briefly studied by Ernest André (1874), Escherich (1897), Forel (1874), Gradl (1879), von Hagens (1865, 1879), Janet (1897), Janson (1857), Lucas (1861), Marseul (1853–62), and Wasmann (1886, 1894, 1898), and several North African species have been described by Lewis (1888a, 1888b) and Thery (1897). Some attention has been paid to our North American *Hetærii* by Brues (1903), Cockerell (1890), Fall (1907), Liebeck (1891), Schwarz (1889), and Wickham (1892).

Most of these authors, however, merely record the occurrence of the beetles with certain ants (in several instances inaccurately identified) but tell us nothing about their habits. Indeed, apart from their occurrence with certain hosts, the habits of all the species, except the